

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-2, 11-12 and 25-26 are pending, with claims 1, 11-12 and 23 amended, claims 5-10, 15-19, 21-26 cancelled without prejudice or disclaimer, and claims 25-26 added by the present amendment. Claims 1 and 11 are independent.

In the Official Action, claims 1-2, 5 and 9-12 were rejected under 35 U.S.C. § 103(a) as being in view of Levesque (U.S. Patent Pub. No. 2003/0170003) and Seo (U.S. Patent Pub. No. 2001/0008427); claims 6-7 and 15-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Levesque, Seo and Cavallerano (U.S. Patent Pub. No. 2002/0057372); claims 8 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Levesque, Seo and Takahashi (U.S. Patent Pub. No. 2003/0099457); claims 18-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Levesque, Seo, Takahashi and Cavallerano; claims 21-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Levesque, Seo and Plourde (U.S. Patent Pub. No. 2003/0108331); and claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Levesque, Seo, Takahashi and Plourde.

Applicant acknowledges with appreciation the personal interview between the Examiner and Applicant's representative on November 17, 2009. During the interview, no agreement was reached.

Turning to the current rejection, as a first point of order, the Office Action summary again indicates that claims 1-20 are pending. However, only claims 1-3 and 5-20 were pending

at the time that the Official Action was issued. Applicant requests that the Office Action summary accurately reflect the status of the claims.

Claims 1 and 11 are amended to recite features related to previously pending 6-7 and 21, and 15-16 and 24, respectively. Claims 1, 11-12 and 23 are further amended, and claims 25-26 are added, to more clearly describe and distinctly claim Applicant's invention. Support for this amendment can be found in Applicant's originally filed specification. No new matter is added.

In view of the incorporation of features related to claims 15-16 into claim 11, the rejection of claim 11 is moot. Briefly recapitulating, amended independent claim 11 is directed to

An image recording and reproducing method, comprising:

tuning a live signal using a tuner;

selecting a time shift mode using a mode setup unit;

when a signal is reproduced in the time shift mode, decoding the live signal outputted from the tuner and a time shift signal through first and second decoding units, respectively, wherein the time shift signal is a time delayed signal of the live signal outputted from the tuner;

processing the decoded live signal and the decoded time shift signal;

simultaneously displaying the processed live signal and the processed time shift signal in accordance with a first and second display mode;

in response to a user selection, controllably switching between the first and second display mode,

wherein, in the first display mode, the step of simultaneously displaying comprises simultaneously displaying the processed live signal and the processed time shift signal on a main screen and a sub-screen of the main screen, respectively, and

wherein, in the second display mode, the step of simultaneously displaying comprises simultaneously displaying the processed time shift signal and the processed live signal on the main screen and the sub-screen of the main screen, respectively;

displaying a progress status bar indicating the current reproducing position of the time shift signal compared to the reproducing position of the live signal.

Levesque describes a display method that includes a real-time display mode and a time-shifted display mode. The real-time mode includes delivering real-time video frames for display. The time-shifted mode includes delivering time-shifted video frames for display, the time-shifted video frames being delayed relative to the real-time video frames. However, as acknowledged by the Official Action, Levesque does not simultaneously display a processed live signal and a processed time shift signal. In Levesque, the user switches between only displaying the real-time broadcast and only displaying the time-shifted broadcast. To cure this deficiency, the Official Action applies Seo.

Seo describes a picture-in-picture (PIP) type time shifting method that includes displaying multiple PIPs, where at least one PIP is a real-time display and another PIP is a time-delay display. However, as acknowledged by the Official Action, Levesque and Seo do not disclose or suggest switching displays between a main screen and a sub-screen. To cure this deficiency, the Official Action applies Cavallerano.

Cavallerano describes swapping signals between a main screen and PIP screen. However, as acknowledged by the Official Action, Levesque, Seo and Cavallerano do not disclose or suggest displaying a progress status bar indicating the current reproducing position of the time shift signal compared to the reproducing position of the live signal. To cure this deficiency, the Official Action applies Plourde.

Applied FIGS. 20-22 of Plourde are screen diagrams that illustrate an example user interface screen display that can be presented on, for example, a television or other display device. These example screen displays depict a progression through three media content

instances, including a short rewind between the beginning of one media content instance and the end of the media content instance before it. However, contrary to the Official Action, Plourde does not disclose or suggest “a progress status bar indicating the current reproducing position of the time shift signal compared to the reproducing position of the live signal.” None of the three examples of Plourde show a reproducing position of a live signal. Thus, none of the three examples of Plourde show “the current reproducing position of the time shift signal compared to the reproducing position of the live signal.”

As none of the cited art, individually or in combination, disclose or suggest at least the above-noted features of independent claims 1, 10-11 and 17, Applicant submits the inventions defined by claims 1, 10-11 and 17, and all claims depending therefrom, are not rendered obvious by the asserted references for at least the reasons stated above.

MPEP 2141 notes that prior art is not limited just to the references being applied, but includes the understanding of one of ordinary skill in the art. MPEP 2141 further notes that the prior art reference (or references when combined) need not teach or suggest all the claim limitations. However, an obviousness-type rejection must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. MPEP 2141 goes on to list exemplary rationales that may support a conclusion of obviousness. However, Applicant submits that the Official Action and the applied references present no objective evidence that would support an obviousness-type rejection of Applicant's amended claims based on one of these exemplary rationales.

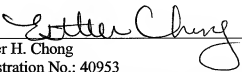
Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael E. Monaco, Reg. No. 52,041, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.147; particularly, extension of time fees.

Dated: May 17, 2010

Respectfully submitted,

By 
Esther H. Chong
Registration No.: 40953
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road, Suite 100 East
P.O. Box 747
Falls Church, VA 22040-0747
703-205-8000